Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A communication system for supporting base station (BS) / mobile terminal (MT) wireless bi-directional communications via ~~the~~ utilization of a radio frame format ~~having sequentially identified system~~ defined by radio frames that include a numeric identifying designation comprising:

a BS having:

a transmitter configured to transmit selectively formatted communication data to MTs within system radio frames, and

a receiver configured to receive communication data from MTs within system radio frames;

said BS receiver having an associated processor configured to measure timing deviation (TD) of received ~~MT transmissions in identified~~ radio frames in which communication data is received from a selected MT;

a timing advance (TA) signal generator associated with said BS configured to provide TA command signals for transmission by said BS to selected MTs;

said TA command signal generator configured to generate TA command signals which include:

TA data which is calculated based upon measured TD in ~~an identified~~ a received radio frame for a selected MT, and

a Connect Frame Number (CFN) specifying a particular radio frame for effectuating a timing adjustment by the selected MT; and

said BS processor configured to measure the TD for communication data received from a selected MT to which a TA command signal had been transmitted in the frame specified in the CFN of the transmitted TA command signal.

2. (Previously Presented) A communication system according to claim 1 wherein:

said TA command signal generator is configured to only generate a TA command signal for a selected MT when a measured TD of a transmission received from the selected MT does not fall within a selected timing synchronization range.

3. (Previously Presented) A communication system according to claim 1 further comprising:

at least one mobile terminal (MT) having:

a transmitter and an associated MT processor configured to transmit selectively formatted communication data to a BS within system radio frames synchronized by said MT processor; and

a receiver configured to receive communication data from a BS within system radio frames; and

said MT processor configured to adjust the timing of the communication date transmitted by said MT transmitter in response to TA data in a received TA command signal commencing in the radio frame specified in the CFN of the received TA command signal.

4. (Previously Presented) A communication system according to claim 3 wherein:

said TA signal generator is configured to only generate a TA signal for a selected MT when the identified TD of a transmission received from the selected MT does not fall within a selected timing synchronization range.

5. (Previously Presented) A communication system according to claim 1 further comprising:

a plurality of base stations (BSs), each having:

a transmitter configured to transmit selectively formatted communication data to MTs within system radio frames, and

a receiver configured to receive communication data from MTs within system radio frames;

each said BS receiver having an associated processor configured to measure a timing deviation (TD) of received MT transmissions in identified radio frames in which communication data is received from selected MTs;

said timing advance (TA) command signal generator associated with each said BS configured to provide each said BS selected TA command signals for transmission to respective selected MTs; and

each said BS processor configured to measure the TD for communication data received from a respective selected MT to which a respective TA command signal had been transmitted in the frame specified in the CFN of the respective transmitted TA command signal.

6. (Previously Presented) A communication system according to claim 5 wherein:

said TA command signal generator is configured to only generate a TA command signal for a selected MT when the measured TD of a transmission received from the selected MT does not fall within a selected timing synchronization range.

7. (Previously Presented) A communication system according to claim 5 further comprising:

a geographic locator associated with said BS controller and said BSs such that measured TD by one or more of said BS processors with respect to communication data received from a selected MT in a specified time frame provides a basis configured to calculate the geographic location of the selected MT during the specified time frame in conjunction with the TA data of a most recent successful TA command signal issued by the BS controller to the selected MT.

8. (Previously Presented) A communication system according to claim 5 further comprising:

a plurality of mobile terminals (MTs), each having:

a transmitter and an associated processor configured to transmit selectively formatted communication data to said BSs within system radio frames synchronized by said processor; and

a receiver configured to receive communication data from said BSs within system radio frames; and

each said MT processor configured to adjust the timing of communication data transmitted by said respective MT transmitter in response to TA data in a received TA command signal commencing in the time frame specified in the CFN of the received TA command signal.

9. (Previously Presented) A communication system according to claim 3 wherein:

said TA command signal generator is configured to only generate a TA command signal for a selected MT when the measured TD of a transmission received from the selected MT does not fall within a selected timing synchronization range.

10. (Currently Amended) A mobile terminal (MT) for a communication system which supports base station (BS) / mobile terminal (MT) wireless bi-directional communications via ~~the~~ utilization of a radio frame format ~~having sequentially identified system~~ defined by radio frames that include a numeric identifying designation where a BS transmits selectively formatted communication data to MTs within system radio frames, including timing advance (TA) command signals which include TA data and a Connect Frame Number (CFN) specifying a particular radio frame for effectuating a timing adjustment by a MT, the mobile terminal (MT) comprising:

a transmitter and an associated processor configured to transmit selectively formatted communication data to a BS within system radio frames synchronized by said processor; and

a receiver configured to receive communication data from the BS within system radio frames; and

said MT processor configured to adjust the timing of communication data transmitted by said MT processor in response to TA data in a received TA command signal commencing in the radio frame specified in the CFN of the received TA command signal.

11. (Currently Amended) A method of synchronizing communication data at a base station for a communication system supporting wireless bi-directional communications between a base station (BS) and a plurality of mobile terminals (MTs) via ~~the~~ utilization of a ~~sequential~~ radio frame format ~~having identified system~~ defined by radio frames that include a numeric identifying designation, where the BS transmits selectively formatted communication data to MTs within system radio frames and receives communication data from MTs within system radio frames, and at least one mobile terminal (MT) transmits selectively formatted communications data to the BS within system radio frames and receives communication data from said BS within system radio frames, the method comprising:

a) measuring timing deviation (TD) of communication data received from a selected MT by the BS and performing the following steps when the measured TD does not fall within a selected timing synchronization range;

b) generating a TA command signal which includes:

TA data calculated based upon the measured TD of the communication data received from the selected MT, and

a Connect Frame Number (CFN) specifying a particular radio frame for effectuating a timing adjustment by the selected MT;

c) transmitting the TA command signal to the selected MT;

d) if the TA command signal is received by the selected MT, adjusting the timing of communication data transmitted by the selected MT in response to the TA command signal based on the TA data and commencing in the radio frame specified by the CFN of the received TA command signal; and

e) measuring the TD for communication data received from the selected MT in the radio frame specified by the CFN of the transmitted TA command signal.

12. (Original) The method of claim 11 further comprising:

repeating steps b)-e) when the measured TD of a transmission received from the selected MT in step e) does not fall within the selected timing synchronization range.

13. (Original) The method of claim 12 wherein steps b)-e) are performed whenever measured TD of communication data received from the selected MT does not fall within the selected timing synchronization range.

14. (Currently Amended) A method of geographically locating a mobile terminal (MT) in a communication system having a plurality of base stations (BSs) supporting wireless bi-directional BS/MT communications via ~~the~~ utilization of a ~~sequential~~ radio frame format ~~having identified system~~ defined by radio frames that include a numeric identifying designation where the BSs transmit selectively formatted communication data to MTs within system radio frames and receive communication data from MTs within system radio frames and where the MTs transmit selectively formatted communications data to the BSs within system radio frames and receive communication data from said BSs within system radio frames, the method comprising:

communicating timing advance (TA) command signals to a selected MT which signals include TA data and a Connect Frame Number (CFN) specifying a particular radio frame for effectuating a timing adjustment by the selected MT;

measuring timing deviation (TD) in each CFN specified radio frame of communication data received from the selected MT by a BS to determine whether each respective command signal was successful;

measuring timing deviation (TD) of a received MT transmission from the selected MT in a selected radio frame by said BS; and

using the measured TD from the selected radio frame and the TA data of a most recent successful TA command signal transmitted to the selected MT to calculate the geographic location of the selected MT.

15. (Original) The method according to claim 14 wherein timing deviation (TD) of communication data received for the selected MT by a second BS in the selected radio frame is measured and also used in the calculation of geographic location of the selected MT.

16. (Original) The method according to claim 15 wherein timing deviation (TD) of communication data received for the selected MT by a second BS in the selected radio frame is measured and also used in the calculation of geographic location of the selected MT.

17. (Original) The method according to claim 14 wherein the selected MT measures relative frame reception difference between cells and the cell reception difference measurements are also used in calculating geographic location.